a diode detector connected to an output of the narrow bandpass filter.

6. The device of claim 5, wherein the antenna is a planar antenna.

7. The device of claim 5, wherein the antenna is a waveguide horn antenna.

8. The device of claim 5, wherein the low noise amplifier is implemented using MMIC.

9. The device of claim 1, wherein the signal processor includes an audio speaker.

10. The device of claim 1, wherein the RF signal has a frequency in the range of 100 MHz to 200 GHz.

11. The device of claim 1, wherein the RF signal has a frequency in the range of 1 GHz to 100 GHz.

12. The device of claim 1, wherein the RF signal has a frequency in the range of 10 GHz to 100 GHz.

13. A method of reproducing an audible sound, comprising:

illuminating an object with a generated RF signal having a frequency of at least 100 MHz and having an unmodulated amplitude;

extracting amplitude modulated information from reflections of the generated RF signal;

isolating the portions of the extracted information corresponding to audio frequencies; and

generating audio using the isolated portions of the extracted information.

14. The device of claim 13, wherein the RF signal has a frequency in the range of 100 MHz to 200 GHz.

15. The device of claim 13, wherein the RF signal has a frequency in the range of 1 GHz to 100 GHz.

16. The device of claim 13, wherein the RF signal has a frequency in the range of 10 GHz to 100 GHz.

17. A system for determining the frequency with which an object vibrates, comprising:

means for generating an RF signal having a frequency of at least 100 MHz;

means for receiving reflections of the RF signal reflected by the object; and

means for demodulating the received RF signal to extract a signal indicative of the frequency with which the object is vibrating.

18. The system of claim 17, further comprising means for generating an audio signal indicative of the audio frequency components of the extracted signal.

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